

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10521109
Source: PCT
Date Processed by STIC: 1-27-05

ENTERED

CRF Errors Edited by the STIC Systems
Branch

Serial Number: 10521109

CRF Edit Date: 1-27-05
Edited by: KE

 Realigned nucleic acid/amino acid numbers/text increases where the sequence text "wrapped" to the next line

 Corrected the SEQ ID NO. Sequence numbers edited were:

 Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

✓ Deleted: ✓ invalid beginning/end-of-file text ; page numbers

 Inserted mandatory headings/numeric identifiers, specifically:

 Moved responses to same line as heading/numeric identifier, specifically:

 Other:



PCT

RAW SEQUENCE LISTING

DATE: 01/27/2005

PATENT APPLICATION: US/10/521,109

TIME: 09:43:17

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\01272005\J521109.raw

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3 <110> APPLICANT: TEDESCO, Francesco
4   MARZARI, Roberto
6 <120> TITLE OF INVENTION: Antibodies anti C5 of the complement and their use
8 <130> FILE REFERENCE: 50294/016001
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/521,109
C--> 10 <141> CURRENT FILING DATE: 2005-01-11
10 <150> PRIOR APPLICATION NUMBER: PCT/EP2003/007487
11 <151> PRIOR FILING DATE: 2003-07-10
13 <150> PRIOR APPLICATION NUMBER: MI2002A001527
14 <151> PRIOR FILING DATE: 2002-07-11
16 <160> NUMBER OF SEQ ID NOS: 35
18 <170> SOFTWARE: PatentIn version 3.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 342
22 <212> TYPE: DNA
23 <213> ORGANISM: Homo sapiens
25 <220> FEATURE:
26 <221> NAME/KEY: CDS
27 <222> LOCATION: (1)..(342)
28 <223> OTHER INFORMATION: Light chain of the TS-A12/22 antibody
31 <400> SEQUENCE: 1
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33 Asp Ile Arg Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
34 1           5           10           15
36 gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc      96
37 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
38           20           25           30
40 tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag      144
41 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
42           35           40           45
44 cct cct aag ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc      192
45 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
46           50           55           60
48 cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc      240
49 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
50 65           70           75           80
52 atc agc agc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa      288
53 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
54           85           90           95
56 tat tat agt act cct cag ctc act ttc ggc gga agg acc aaa gtg gat      336
57 Tyr Tyr Ser Thr Pro Gln Leu Thr Phe Gly Gly Arg Thr Lys Val Asp
58           100          105          110
60 atc aaa      342

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61 Ile Lys
65 <210> SEQ ID NO: 2
66 <211> LENGTH: 114
67 <212> TYPE: PRT
68 <213> ORGANISM: Homo sapiens
70 <400> SEQUENCE: 2
72 Asp Ile Arg Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
73 1 5 10 15
76 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
77 20 25 30
80 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
81 35 40 45
84 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
85 50 55 60
88 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
89 65 70 75 80
92 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
93 85 90 95
96 Tyr Tyr Ser Thr Pro Gln Leu Thr Phe Gly Gly Arg Thr Lys Val Asp
97 100 105 110
100 Ile Lys
104 <210> SEQ ID NO: 3
105 <211> LENGTH: 345
106 <212> TYPE: DNA
107 <213> ORGANISM: Homo sapiens
109 <220> FEATURE:
110 <221> NAME/KEY: CDS
111 <222> LOCATION: (1)..(345)
112 <223> OTHER INFORMATION: Heavy chain of the TS-A12/22 antibody
115 <400> SEQUENCE: 3
116 cag gta cag ctg cag cag tca gag gga ggc gtg gtc cag cct ggg agg 48
117 Gln Val Gln Leu Gln Gln Ser Glu Gly Gly Val Val Gln Pro Gly Arg
118 1 5 10 15
120 tcc ctg aga ctc tcc tgt gca gcg tct gga ttc acc ttc agt agc tat 96
121 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
122 20 25 30
124 ggc atg aac tgg gtc cgc cag gct cca ggg aag ggg ctg gag tgg gtt 144
125 Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
126 35 40 45
128 tca tac att agt agt agt agt agt acc ata tac tac gca gac tct gtg 192
129 Ser Tyr Ile Ser Ser Ser Ser Ser Thr Ile Tyr Tyr Ala Asp Ser Val
130 50 55 60
132 aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac acg ctg tat 240
133 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
134 65 70 75 80
136 ctg caa atg aac agc ctg aga gcc gag gac acg gct gtg tat tac tgt 288
137 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
138 85 90 95
140 gcg aga ggg cct ggt atg gac gtc tgg ggc caa ggg acc acg gtc acc 336

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141 Ala Arg Gly Pro Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
142           100           105           110
144 gtc tcc tca
145 Val Ser Ser
146           115
149 <210> SEQ ID NO: 4
150 <211> LENGTH: 115
151 <212> TYPE: PRT
152 <213> ORGANISM: Homo sapiens
154 <400> SEQUENCE: 4
156 Gln Val Gln Leu Gln Gln Ser Glu Gly Gly Val Val Gln Pro Gly Arg
157 1           5           10           15
160 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
161           20           25           30
164 Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
165           35           40           45
168 Ser Tyr Ile Ser Ser Ser Ser Ser Thr Ile Tyr Tyr Ala Asp Ser Val
169           50           55           60
172 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
173 65           70           75           80
176 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
177           85           90           95
180 Ala Arg Gly Pro Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
181           100           105           110
184 Val Ser Ser
185           115
188 <210> SEQ ID NO: 5
189 <211> LENGTH: 750
190 <212> TYPE: DNA
191 <213> ORGANISM: Homo sapiens
193 <220> FEATURE:
194 <221> NAME/KEY: CDS
195 <222> LOCATION: (1)..(750)
196 <223> OTHER INFORMATION: scFv
199 <400> SEQUENCE: 5
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201 Asp Ile Arg Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
202 1           5           10           15
204 gag agg gcc acc atc aac tgc aag tcc agc cag agt gtt tta tac agc
205 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
206           20           25           30
208 tcc aac aat aag aac tac tta gct tgg tac cag cag aaa cca gga cag
209 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
210           35           40           45
212 cct cct aag ctg ctc att tac tgg gca tct acc cgg gaa tcc ggg gtc
213 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
214           50           55           60
216 cct gac cga ttc agt ggc agc ggg tct ggg aca gat ttc act ctc acc
217 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr

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218 65          70          75          80
220 atc agc agc ctg cag gct gaa gat gtg gca gtt tat tac tgt cag caa      288
221 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
222          85          90          95
224 tat tat agt act cct cag ctc act ttc ggc gga agg acc aaa gtg gat      336
225 Tyr Tyr Ser Thr Pro Gln Leu Thr Phe Gly Gly Arg Thr Lys Val Asp
226          100          105          110
228 atc aaa tcc gga ggg tcg acc ata act tcg tat aat gta tac tat acg      384
229 Ile Lys Ser Gly Gly Ser Thr Ile Thr Ser Tyr Asn Val Tyr Tyr Thr
230          115          120          125
232 aag tta tcc tcg agc ggt acc cag gta cag ctg cag cag tca gag gga      432
233 Lys Leu Ser Ser Ser Gly Thr Gln Val Gln Leu Gln Gln Ser Glu Gly
234          130          135          140
236 ggc gtg gtc cag cct ggg agg tcc ctg aga ctc tcc tgt gca gcg tct      480
237 Gly Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser
238 145          150          155          160
240 gga ttc acc ttc agt agc tat ggc atg aac tgg gtc cgc cag gct cca      528
241 Gly Phe Thr Phe Ser Ser Tyr Gly Met Asn Trp Val Arg Gln Ala Pro
242          165          170          175
244 ggg aag ggg ctg gag tgg gtt tca tac att agt agt agt agt agt acc      576
245 Gly Lys Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Ser Ser Thr
246          180          185          190
248 ata tac tac gca gac tct gtg aag ggc cga ttc acc atc tcc aga gac      624
249 Ile Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
250          195          200          205
252 aat tcc aag aac acg ctg tat ctg caa atg aac agc ctg aga gcc gag      672
253 Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu
254          210          215          220
256 gac acg gct gtg tat tac tgt gcg aga ggg cct ggt atg gac gtc tgg      720
257 Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Pro Gly Met Asp Val Trp
258 225          230          235          240
260 ggc caa ggg acc acg gtc acc gtc tcc tca      750
261 Gly Gln Gly Thr Thr Val Thr Val Ser Ser
262          245          250
265 <210> SEQ ID NO: 6
266 <211> LENGTH: 250
267 <212> TYPE: PRT
268 <213> ORGANISM: Homo sapiens
270 <400> SEQUENCE: 6
272 Asp Ile Arg Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
273 1          5          10          15
276 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
277          20          25          30
280 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
281          35          40          45
284 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
285          50          55          60
288 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
289 65          70          75          80

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292 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
293      85      90      95
296 Tyr Tyr Ser Thr Pro Gln Leu Thr Phe Gly Gly Arg Thr Lys Val Asp
297      100     105     110
300 Ile Lys Ser Gly Gly Ser Thr Ile Thr Ser Tyr Asn Val Tyr Tyr Thr
301      115     120     125
304 Lys Leu Ser Ser Ser Gly Thr Gln Val Gln Leu Gln Gln Ser Glu Gly
305      130     135     140
308 Gly Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser
309 145      150     155     160
312 Gly Phe Thr Phe Ser Ser Tyr Gly Met Asn Trp Val Arg Gln Ala Pro
313      165     170     175
316 Gly Lys Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Ser Ser Thr
317      180     185     190
320 Ile Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
321      195     200     205
324 Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu
325      210     215     220
328 Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Pro Gly Met Asp Val Trp
329 225      230     235     240
332 Gly Gln Gly Thr Thr Val Thr Val Ser Ser
333      245     250

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336 <210> SEQ ID NO: 7

337 <211> LENGTH: 15

338 <212> TYPE: DNA

339 <213> ORGANISM: homo sapiens

341 <220> FEATURE:

342 <221> NAME/KEY: CDS

343 <222> LOCATION: (1)..(15)

344 <223> OTHER INFORMATION: CDR1 region of VH

347 <400> SEQUENCE: 7

348 agc tat ggc atg aac

349 Ser Tyr Gly Met Asn

350 1 5

353 <210> SEQ ID NO: 8

354 <211> LENGTH: 5

355 <212> TYPE: PRT

356 <213> ORGANISM: homo sapiens

358 <400> SEQUENCE: 8

360 Ser Tyr Gly Met Asn

361 1 5

364 <210> SEQ ID NO: 9

365 <211> LENGTH: 51

366 <212> TYPE: DNA

367 <213> ORGANISM: homo sapiens

369 <220> FEATURE:

370 <221> NAME/KEY: CDS

371 <222> LOCATION: (1)..(51)

372 <223> OTHER INFORMATION: CDR2 region of VH

15

VERIFICATION SUMMARY

DATE: 01/27/2005

PATENT APPLICATION: US/10/521,109

TIME: 09:43:18

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\01272005\J521109.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date